I V H S A M E R I C A

Intelligent Vehicle Highway Society of America

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May 28, 1993

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VIA MESSENGER
Ms. Donna Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20036

Re: PR Docket No. 92-235

Dear Ms. Searcy:

On behalf of the Intelligent Vehicle-Higway Society of America ("IVHS AMERICA"), we are writing to express the support in principal of the Society for the FCC's initiative to refarm the Private Land Mobile Radio bands below 512 MHz. Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, 7 FCC Rcd. 8105 (1992).

Incorporated in August, 1990, IVHS AMERICA is a non-profit educational and scientific organization whose purpose is to coordinate and promote the research, development and deployment of intelligent vehicle-highway systems ("IVHS") in the United States.[1] With a membership comprised of federal, state and local government, private industry, and academic interests, IVHS AMERICA is a public/private partnership and serves as a utilized Federal Advisory Committee to the U.S. Department of Transportation ("DoT").

In enacting the Intelligent Vehicle-Highway Systems Act of 1991 ("IVHS Act"), 23 U.S.C. Section 307, Congress set as a national goal the widespread implementation of an IVHS infrastructure to enhance the capacity, efficiency and safety of the Federal-aid highway system and to serve as an alternative to the construction of additional physical capacity in the highway system. Underlying enactment of the IVHS Act was the recognized demand for the development and deployment of IVHS products and services to reduce traffic congestion, improve traffic safety and promote environmental quality. IVHS products and services employ

[1]The views expressed herein are those of IVHS AMERICA and are not necessarily shared by each of the individual members of the Society.

emerging communications, information and transportation technologies to improve the safety and efficiency of use of the roadway infrastructure in the U.S.

Through the use of Advanced Traffic Management Systems ("ATMS"), Advanced Traveler Information Systems ("ATIS") and, ultimately, Advanced Vehicle Control Systems ("AVCS"), the deployment of emerging IVHS technologies holds much promise for promoting increased highway and vehicle safety, reducing roadway congestion and improving mobility, enhancing U.S. economic productivity and increasing the energy efficiency of the U.S. transportation system. Given the significance of these goals, the Executive Branch and Congress have allocated IVHS research and development the highest priority and provided funding for that research over the next six years.

Indeed, IVHS services today are becoming increasingly available throughout the U.S., including, for example, Automatic Vehicle Location ("AVL"), Automatic Vehicle Identification ("AVI"), Stolen Vehicle Recovery ("SVR"), and Electronic Toll and Traffic Management ("ETTM") services. IVHS products are becoming increasingly available, including vehicular collision avoidance radar, in-vehicle and personal computer-based navigation systems and electronic road signs.

At an infrastructure level, the Department of Transportation's Federal Highway Administration has undertaken a procurement looking toward the development in a two stage process of a nationwide IVHS architecture that will apply monitoring and location, communications, data management, control software and display technologies to help solve the traffic congestion, safety, and productivity problems identified in the IVHS Act. The commencement of the first phase of the IVHS system architecture program is expected before year's end. Multiple

b. Traveller Advisory
c. Route Guidance

2. Traffic Management
   a. Traffic Control
   b. Incident Management

3. Freight and Fleet Management
   a. Regulatory Support
   b. Intermodal Terminal Operations

4. Public Transportation and Emergency Vehicle Management
   a. Planning and Scheduling Systems
   b. Prediction of Arrivals

5. Additional Services
   a. MAYDAY Transmissions
   b. HAZMAT Monitoring and Routing
   c. Collision Avoidance

The commonality between those IVHS services and products commercially deployed today or expected shortly and the nationwide integrated IVHS system architecture now under development at DoT is the requirement for access to adequate and suitable RF spectrum. To address these issues, and to interface with the spectrum policymakers at the FCC and NTIA, IVHS AMERICA recently has formed its Communications Spectrum Task Force (the "Task Force") comprised of members with particular expertise in these subjects. The Task Force is in its formative stages, and anticipates that it will submit more detailed Comments in the reply phase of this proceeding.

Pending that submission, IVHS AMERICA wishes to strongly express its support for the Commission's initiative in the refarming docket to greatly increase channel capacity in the PLMR bands below 512 MHz to accommodate the needs of emerging services, like IVHS. Given the existing congestion in the PLMR bands, refarming to deploy more spectrally-efficient technologies is clearly required to make those bands a suitable candidate for the deployment of IVHS products and services, either at the individual product or service level or at the nationwide architecture level. As this docket unfolds, IVHS AMERICA anticipates that specific issues centering around future IVHS usage of the PLMR bands below 512 MHz will emerge, including the potential need for modifications to the proposed Part 88 emissions mask to accommodate IVHS usage of narrowband digital modulation and filtering techniques. IVHS AMERICA wishes to express its commitment to work with the Commission on these

emerging issues through the Task Force to ensure the completeness and accuracy of the record in this docket.

If there are any questions on these Comments, please contact this office.

Sincerely,

W. Daniel Tooney
Director of Standards
and Protocol